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US EPA RECORDS CENTER REGION 5

MEMORANDUM

SUBJECT: Record of Decision, Reilly Tar

FROM:

Michael Kosakowski, Chief

Technical Support Branch, OWPE

Barbara Elkus, Chief Compliance Branch, OWPE

Sam Morekas, Chief State and Regional Coordination Branch, OERR

I have reviewed the Reilly Tar (St. Louis Park, MN) record of decision. As you know I have been involved with this case for over three years, and other offices within the Agency have also participated in various aspects to this case, including proposed remedial decisions before the RI/FS's were initiated. Since this is an on-going case and since the Federal and State Governments have been negotiating with Reilly Tar, enforcement concerns are proper for this site.

I have the following concerns on the record of decision and the accompanying justification.

- Is the new Hinckley well done? How does its operation affect the need for other continuous water supplies?
- 2. Has a sanitary sewer surcharge been factored into the operating costs for well W23?
- 3. I thought the ROD was to have considered gradient control wells in the other aquifers and the pockets of pollution in the swamp. When will this be addressed by a ROD.
- The assessment of the safety of the alternatives was based upon a risk level of 1 in 100,000 and with the limitations of the analytical methods employed. However, creosote oil consists of thousands of polynuclear aromatic and other compounds, many of which are known or suspected carcinogens. These compounds pose an addition risk of cancer of 1 in 1,000,000 at concentrations which are at or near the level of detection for the methods employed.

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It has been demonstrated that these chemicals can interact synergistically and result in more potent mixtures than expected if one were to consider the additive risks of individual compounds. The risk level of 1 in 100,000 is greater than is desired (1 in 1,000,000), but when the synergistic effects are considered, the risk level used may, in fact, be several times greater.

5. Tests performed on the existing water treatment plant at well SLP 15, suggested that the PAH removal may be due to adsorption of the PAH throughout the treatment system. If this occurred during the operation of well SLP 15, the population may have been subjected to even lower levels of PAH than previously thought.

This a critical factor when the Dusich epidemiology study (1979) is considered. In that paper it was established that St. Louis Park has a significantly higher incidence of certain forms of cancer than its neighboring communities and that even within the city there are areas of high cancer rates. Since no case control was done, the conclusions of the study are considered invalid, and the cause for the high cancer rate is still not proven. If a measurable cancer incidence rate is observed in a small segment of a community of about 50,000 and if the cancer is due to the drinking water, the incremental removal of PAH by the proposed remedy, activated carbon, may not be enough to achieve a risk level of 1 in 100,000 or less.

Consequently, the continuous tie-in of SLP 15 to the municipal drinking water supply is not prudent without additional evaluation of the associated risks. The Office of Health and Environmental Assessment has participated with the regional and state program people on this case. I am forwarding them a copy of the record of decision to review, and I recommend that they be consulted on the remedial decision at this site.

- cc: P. Bitter, Region 5
 - E. Anderson, OHEA
 - H. Gibb, OHEA
 - F. Biros, OWPE